(19) World Intellectual Property Organization International Bureau



TO AND THE WAR IN THE REAL PROPERTY OF A PARTICULAR PROPERTY OF A PARTICULAR PROPERTY OF A PARTICULAR PROPERTY.

(43) International Publication Date 19 February 2004 (19.02.2004)

PCT

(10) International Publication Number WO 2004/015435 A1

(51) International Patent Classification⁷: 33/00, 33/035

G01R 33/022,

(21) International Application Number:

PCT/AU2003/000999

(22) International Filing Date: 7 August 2003 (07.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 2002950624

7 August 2002 (07.08.2002) AU

- (71) Applicant (for all designated States except US): COM-MONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION [AU/AU]; Limestone Ave, Campbell, Australian Capital Territory 2601 (AU).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): TILBROOK, David [AU/AU]; P.O Box 218, Lindfield, New South Wales 2070 (AU).

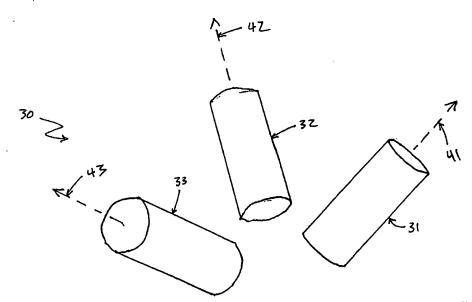
- (74) Agent: FB RICE & CO.; 139-141 Rathdowne St, Carlton, Victoria 3053 (AU).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND APPARATUS FOR MAGNETIC FIELD DETECTION



(57) Abstract: A method and device for field detection are provided, in which one or more gradiometers (31, 32, 33) are positioned in the field and rotated about their axes. Rotation of a single gradiometer allows an output signal of the gradiometer to be analysed in the Fourier domain, which allows particular field components to be obtained, and also separates the field signal from noise, in the frequency domain. Use of three such rotating gradiometers with non-parallel axes allows a complete magnetic field gradient tensor to be obtained with data redundancy, and can reduce crosstalk.

004/015435 A1 III